## CLAIMS

1. A laser machining robot, in which both a laser machining head for laser machining and a distance sensor are mounted on the robot arm tip end, a distance between the distance sensor and a workpiece is detected by the distance sensor, and the laser machining is carried out by moving said laser machining head while keeping a distance between the workpiece and a tip end of said laser machining head at a predetermined distance based on the detected distance, the laser machining robot comprising:

control means for controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during said laser machining.

2. The laser machining robot according to claim 1, further comprising:

means for changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity of said laser machining robot is changed by moving control exerted by said control means.

3. A laser machining robot, in which a laser machining head that comprises a distance sensor and carries out laser machining is mounted on a tip end of a robot arm, a distance between the distance sensor and a workpiece is detected by the distance sensor, and the laser machining is carried out by moving said laser machining head while keeping a distance between the workpiece

and a tip end of said laser machining head based on the detected distance at a predetermined distance, the laser machining robot comprising:

control means for controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during said laser machining.

4. The laser machining robot according to claim 3, further comprising:

means for changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity of said laser machining robot is changed by moving control exerted by said control means.